

WHAT IS CLAIMED IS:

1. A method of manufacturing a separator for a fuel cell comprising:

5 preparing a raw material by mixing a carbon, an epoxy resin and a phenolic resin;

charging the raw material into a predetermined mold; and

10 heat press forming the raw material charged into the mold.

2. A method according to claim 1, wherein, when heated to chemically react and cure the epoxy resin and the phenolic resin, a ratio of an amount of an epoxy group of the chemically reacted epoxy resin to an amount of hydroxyl group of the chemically reacted phenolic resin is adjusted to a value ranging from 0.8 to 1.2.

3. A method according to claim 1, wherein the epoxy resin comprises a cresol novolac type epoxy resin.

4. A method according to claim 1, wherein the epoxy resin comprises a glycidylamine type epoxy resin.

5. A method according to claim 1, wherein the epoxy resin comprises a bisphenol A type epoxy resin.

6. A method according to claim 1, wherein the phenolic resin comprises a novolac type phenolic resin.

7. A method according to claim 1, wherein the phenolic resin comprises a resol type phenolic resin.

8. A method according to claim 1, wherein the carbon comprises a powder formed of scaly natural graphite particles having an average particle size ranging from 5 to 50 μ m.

9. A method according to claim 1, wherein the step of preparing the raw material includes the substeps of:

forming the raw material into a slurry; and

15 preparing a powder having an average particle size ranging from 50 to 150 μ m and a particle size distribution ranging from 50 to 300 μ m by spraying and drying the slurry for granulation.

20 10. A method according to claim 1, further comprising the step of grinding a surface of the separator which is brought into contact with an adjacent member to be eliminated when the separator is incorporated into a fuel cell.

25 11. A method according to claim 1, wherein a ratio of a

12. A separator for a fuel cell comprising:

a binder containing phenolic resin and epoxy resin,

10 particles.

add
D1